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ABSTRACT

In spring 1984, a study was conducted in the Saddleback Community College District (SCCD) to assess student flexibility in choosing class schedules and to measure the importance of employment and child care responsibilities in the course selection process. The study population consisted of all students who completed class registration for spring 1984, broken down into eight enrollment categories determined by full-/part-time status and time and location of courses taken. In-person and telephone interviews were conducted with a total sample of 442 students. Study findings included the following: (1) 91% of the full-time students expressed a willingness to replace at least one desired class on their study list with another class; (2) only 43% of the part-time evening students attending at North Campus were willing to allow changes to their schedules; (3) the flexibility of full-time students was not significantly different from part-time students when the number of units in their schedule which they were willing to replace was considered; (4) faced with an inability to enroll in a desired class section, a student was more likely to take a different course at the desired time than find an open section of that course; and (5) the scheduling flexibility of students for whom work or child care responsibilities did not affect the time and place of their course differed little from those who had such constraints. The study report includes a literature review, recommendations for class schedule planning and student counseling, and the survey instrument. (RO)

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Saddleback Community College District
Institutional Research Report

DETERMINATION OF THE EXTENT OF STUDENT
FLEXIBILITY IN CHOOSING
CLASS SCHEDULES

by

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August 1986

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ABSTRACT

It was the purpose of this investigation to determine the extent of student flexibility in choosing class schedules. It was also the purpose of this study to specifically measure the importance of employment and child care responsibilities in the selection process. The method of investigation was an opinion survey of students taken in person and by phone during the Spring 1984 semester. Student samples were created in eight enrollment categories determined by the number of units they were taking as well as the time and location of these courses. It was found that the flexibility of full time students was not significantly different from part time students when the number of units in their schedule they were willing to replace was considered. The time a class was offered was more important than the course itself. Faced with an inability to enroll in a desired class, a student was more likely to take a different class at that desired time than find an open section of the course. The scheduling flexibility of students for whom work or child care responsibilities do not affect the time and place of their course differed little from those who had such constraints. It was recommended that the class periods chosen for the schedule of classes be as uniform as possible. If this is accomplished, a student faced with a closed or cancelled class, will find it easier to reschedule those units. Student scheduling flexibility should be encouraged because it will serve to maintain student enrollment and financial support of the institution.

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CHAPTER 1

INTRODUCTION

The creation of the class schedule each semester is an important and, at times, difficult task. The importance of the class schedule can not be overstated because it is through this organizational device that the College attracts its students and carries on its primary function -- education. The design of the schedule of classes is a major institutional concern each semester. The decisions relating to which classes will be taught on which days, at what times, in which rooms and by whom require the delicate balance of student interests, physical plant availability, faculty needs, administrative concerns and budgetary support. Once published and in the hands of the students, the class schedule is essentially "etched in stone". While a class can easily be deleted, moved to a different size room, split into several separate sections or assigned to another instructor, nothing else can be attempted without great risk. Successfully adding a class section not already in the schedule is difficult because few potential students become aware of its existence and thus cancellation due to under enrollment is a real possibility. This inflexibility of the class schedule adds a great deal to the difficulty of the creation task because, for all practical purposes, it must be right the very first time. Once mailed out there can be no second edition.

No matter what final form the schedule of classes takes, it will not conform to the list of first choices of the entire population of students. Faculty and administrative compromises are an integral part of

its creation and student compromises comprise a large element of its utilization by the students. It was the purpose of this study to determine the extent of student flexibility in choosing class schedules. Although many factors affect a student's schedule selection, it was also the purpose of this study to specifically measure the importance of employment and child care responsibilities in the selection process.

The method of investigation was an opinion survey. The questionnaires were completed by College personnel on the basis of in person interviews with students during the registration process for the Spring 1984 semester and telephone interviews with enrolled students midway through the Spring 1984 semester. It is on the basis of these interviews that this study rests.

CHAPTER 2

REVIEW OF THE LITERATURE

Schedule Conflicts Affect an Institution's Enrollment

Several studies have shown that scheduling conflicts often affect students' enrollment decisions and that loss of enrollment for this reason can be significant to a college.

In a mail in survey during the fall of 1980 at Tidewater Community College, Virginia with a 62% response rate Gresty (1981) found that 25% of the respondents indicated an inability to schedule all the courses desired. Thirty-two percent of this group gave as their reason a time conflict between desired courses or the students' schedule. When the loss of class hours was extrapolated to the institution as a whole, it was estimated that 450 full-time equivalent student hours (FTE) were lost.

Lucas (1977) described a survey with a 39% response rate run during registration for Fall 1977 at William Rainey Harper College, Illinois to determine the extent of enrollment loss due to scheduling problems. Twenty-nine percent of the respondents were not able to get all the classes they wanted and the most frequently stated reasons were: class was closed, classes were offered at inconvenient times. The institutional FTE loss was estimated at between 5 and 10 percent. In a later study Lucas (1980) found that the primary reason given by students for withdrawing from courses was that the times the course met proved to be too inconvenient.

In an investigation of the characteristics of the students who attended Lakeland Community College during the Fall 1978 quarter but did not return for the Winter 1979 quarter, a questionnaire was mailed to half of these students and about 25% were returned. Fifty-eight percent indicated a major reason for not returning was "scheduling conflicts between jobs and studies" and 33% pointed to the fact that the "time courses (were) offered was not convenient" (Donsky 1979).

A telephone survey was conducted at Charles Stewart Mott Community College in 1982 to determine why many persons admitted to the College never completed any courses. While Zitzewitz (1982) found the most frequent reason (17%) given to be the intervention of personal or family problems, the next most often cited reason (14%) was that the classes they needed were full or cancelled. Nine percent indicated they could not schedule the classes they wanted to take.

Pastor (1984) found, at Northern Essex Community College, Massachusetts, that nontraditionally aged students were more influenced by course accessibility than the younger (traditionally aged) students.

Baratta (1977) described a survey taken at Moraine Valley Community College, Illinois during course registration for Spring 1977. With a 45% response rate the survey found that 14% of the full-time students and 16% of the part-time students were not able to schedule the classes they needed.

The results of these studies support Thompson's (1985) argument that proper scheduling of classes is "crucial to attracting and retaining the reservoir of students needed to maintain academic and financial integrity.

Student Class Schedule Preferences

In order to build a rational base for scheduling decisions, students, faculty and community members have been asked to identify their preferences for class times and number of meetings per week for three unit courses. These studies show that early mornings and mid-afternoons are the least popular options. Meeting frequencies of once or twice a week are usually preferred of three unit courses over three meetings per week.

When students in the Tidewater Community College study (Gresty 1981) were asked if they would enroll in courses offered at times other than from 8 a.m. to 1 p.m., they indicated a much greater preference for classes starting at 4:15 p.m. or later in the evening than for either midafternoon or early morning classes.

At Moraine Valley Community College the full-time students constituted 30% of the total population in 1977. Baratta (1977) found their time preferences to be: morning -- 62%; afternoon -- 21%; evening -- 17%. Their preference for the number of meetings per week for a 3 unit class was: one -- 16%; two -- 48%; three -- 36%. The time preferences for the part-time students was: morning -- 40%; afternoon -- 7%; evening -- 53%. Their preference for the number of meetings per week for a 3 unit class was: one -- 34%, two -- 57%; three -- 9%. In a parallel study at Moraine Valley Community College, Noonan (1977) found that the faculty preference for the number of meetings per week for a 3 unit class was: one -- 23%; two -- 64%; three -- 13%. The actual class schedule had the number of meetings for 3 unit classes scheduled as follows: one -- 25%, two -- 44%; three -- 31%.

In a 1972 survey for the Commission on Non-traditional Study (Gould Commission) adults were asked to indicate their preference for class time schedules and their primary responses were: one evening a week -- 23%; two or more evenings a week -- 26%; two or more mornings or afternoons a week -- 11% (Carnegie, 1982).

In a needs assessment telephone survey of the surrounding community, South Oklahoma Junior College (1978) found that the distribution of preferred course times was: early evening -- 31%; early afternoon -- 31%; late evening -- 17%; mornings -- 13%; late afternoon -- 4%; anytime -- 4%. The preferred days were Tuesday or Wednesday each with approximately 27% of the sample. Monday or Thursday followed next in preference each with 17% of the sample and finally Friday was preferred by 8%.

In a similar needs assessment telephone survey of the community surrounding Santa Ana College, California, Slark (1980) found the distribution of preferred class times to be: mornings -- 33%; afternoons -- 15%; evenings -- 48%. A 3 unit class meeting once a week was overwhelmingly preferred to one meeting three times a week by every age group except those under 20 years. Tuesday and Wednesday were slightly more popular class days than Monday or Thursday. Friday was by far the least desirable day during the week (monday through friday) for a class to be scheduled.

Sworder (1986) in an opinion survey of students during class registration at Saddleback College for the Spring 1986 semester found that fifty-eight percent of the student population was willing to take afternoon classes. A three unit class scheduled twice a week was preferred by 59% of the population willing to take afternoon classes. A single three

hour session per week was the preference of 39% of this group, while 12% preferred 3 weekly one hour sessions. The most popular afternoon times following the saturated noon time slot were Tuesday/Thursday 1:30 to 3:00 p.m. and Monday/Wednesday 1:30 to 3:00 p.m.

Student Scheduling Flexibility

Some studies have tried to measure student flexibility when faced with conflicts between class and personal schedules. In one such study Gresty (1981) found that almost half (47%) of the respondents to the Tidewater Community College survey indicated that when faced with a conflict between their personal/work schedules and class schedule, they would compromise between their two schedules in order to take classes. Nineteen percent said they would compromise their personal/work schedule in order to enroll in the desired course(s). Twenty-seven percent of the full-time students and twenty-two percent of the day students would choose to compromise their personal/work schedule in favor of taking a desired course. Approximately 31% of the survey respondents indicated that they would not enroll in the class if it conflicted with their personal/work schedule.

Gresty (1981) also found that during Fall Quarter 1980 registration, 25% of the respondents were unable to register for all desired courses. Of these students, 44% selected a different course at a more convenient time for the student to replace the desired course. Thirty-eight percent enrolled in the same desired course but at a different time. The remaining 18% did not enroll in additional classes.

Summary of the Review of Literature

The literature clearly described the negative impact schedule conflicts have on college enrollments. Students generally prefer morning and evening classes but most colleges have scheduled these times to the point of saturation. Although efforts are being made to more fully utilize the afternoon portion of the schedule (Carroll, 1986:4), success will depend on the flexibility students exhibit with their class and personal schedules. This issue is of great significance because scheduling difficulty for students can result in a major loss of enrollment to a college and threaten the institutions ability to deliver services and expand upon existing programs and facilities (Gresty, 1981).

CHAPTER 3

PROCEDURE

Population and Sample Selection

The population for this study consisted of all students (approximately 20,000) who completed class registration for the Spring 1984 semester in the Saddleback Community College District. At that time the District operated two main campuses (the North Campus in Irvine, California and the South Campus in Mission Viejo, California) and offered classes in several off-campus sites. The emphasis of the study was placed on the attitudes of students belonging to one of eight specific enrollment categories. These categories and their abbreviations in this study are listed below:

- 1) FT D/DE BC: Full-time students (i.e. enrolled in 12 or more units) taking classes during the day (i.e. before 5 p.m.) or during the day and evening on both main campuses.
- 2) FT D/DE NC: Full-time students taking classes during the day or during the day and evening only on the North Campus.
- 3) FT D/DE SC: Full-time students taking classes during the day or during the day and evening only on the South Campus.
- 4) PT D/DE BC: Part-time students (i.e. enrolled in fewer than 12 units) taking classes during the day or during the day and evening on both main campuses.
- 5) PT D/DE NC: Part-time students taking classes during the day or during the day and evening only on the North Campus.
- 6) PT D/DE SC: Part-time students taking classes during the day or during the day and evening only on the South Campus.
- 7) PT E NC: Part-time students taking classes during the evening (after 5 p.m.) only on the North Campus.
- 8) PT E SC: Part-time students taking classes during the evening only on the South Campus.

It was the goal of the data collection activity to conduct interviews, either in person or by telephone, with approximately 50 students from each category. The first in person interview was held at 9:00 a.m. December 1, 1983 (the beginning of priority registration for the Spring 1984 semester) and the last interview concluded at 4:00 p.m. on January 11, 1984. The first telephone interview was held at 3:00 p.m. on March 1, 1984 and the final telephone interview was held at 3:00 p.m. on March 21, 1984. The subjects for the in person interviews were chosen at the discretion of the interviewing personnel during visits to the class registration area. Once the category quota of approximately 50 students was reached no more members of that group were interviewed. The in person interviews failed to produce the quota for three of the enrollment categories. The Office of Admissions and Records supplied a telephone list for the students in each of these groups. The names were placed on the lists in alphabetical order. The College personnel started with the first name on each list and called each number in succession. If there was no answer, a busy signal, the student was not at home or the student refused to be interviewed, the next number on the list was called. If the student was reached and agreed to the interview, the College personnel completed the questionnaire from the student's responses. The next student on the list was then called. This process was continued until the quota for that group was reached. Table 1 shows the number of students contacted in each category as well as the number reached in person and by telephone.

Table 1
Sample Size For Each Enrollment Category

Category	In Person	By Telephone	Total Sample Size
FT D/DE BC	13	34	47
FT D/DE NC	31	19	50
FT D/DE SC	60	0	60
PT D/DE BC	13	41	54
PT D/DE NC	56	0	56
PT D/DE SC	86	0	86
PT E NC	49	0	49
PT E SC	40	0	40

The total sample size for this study was 442 students. It should be clear from the preceding discussion that no attempt was made to choose a random or demographically representative sample. Rather it was decided to use those budget resources available to support the investigation in as efficient a manner as possible to insure an adequate number of subjects for each enrollment category of primary interest. No claim was made, therefore, that this sample was representative of the District's student population. To emphasize this situation it is instructive to point out some of the peculiarities of the enrollment categories that resulted from the selection technique used. These are listed below:

Category FT D/DE BC: Seventy-two percent of this sample was reached by telephone using names on the telephone list up to and including the last names beginning with Harr. Seventy-nine percent of these telephone contacts were made between noon and 4:00 p.m. No calls were made after 4:00 p.m.

Category FT D/DE NC: Thirty-eight percent of this sample was reached by telephone and all of these students had first names that began with A,B or C. All contacts were made between 11 a.m. and 4 p.m. The only in person student contacts during continuing student registration were made on the South Campus.

Category FT D/DE SC: This entire sample was contacted in person during continuing student registration or on the first day of new student registration. The sample is at least 70% male.

Category PT D/DE BC: Seventy-six percent of this sample was reached by telephone using names up to and including those beginning with Le. Ninety percent of these contacts were made between noon and 4 p.m. Twenty-two percent of the telephone interviews were with Emeritus Institute students taking classes at Leisure World.

Category PT D/DE NC: All of these students had in person interviews. Thirty-two percent of these contacts were made during the fourth day of continuing student registration at the South Campus. All other contacts were made during the first three days of new student registration.

Category PT D/DE SC: All of this sample was completed with in person interviews. Thirty-six percent of these students were contacted on Thursday December 1, 1983. This was the day set aside for priority registration of the handicapped, athletes and other special student groups. Registration on this day was not open to the general student population. The only new students included in the sample were contacted during priority registration.

Category PT E NC: All of this sample was completed with in person interviews between 9 a.m. and 5 p.m. Eighty-four percent of the interviews occurred between 9 a.m. and 2:30 p.m.

Category PT E SC: All of this sample was completed with in person interviews between 9:30 a.m. and 3:30 p.m. and was 75% female.

A frequency distribution plot of the times the interviews took place, excluding the 48 interviews of unknown time which occurred on December 1 and December 5, is shown in Figure 1.

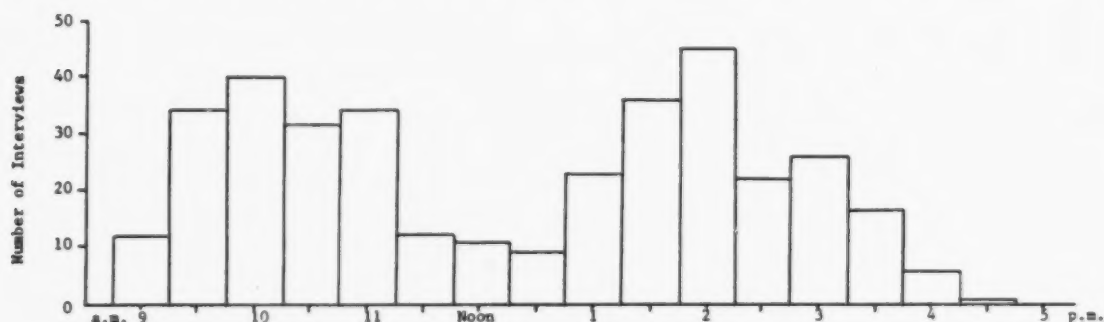


Figure 1

Number of Interviews in Each Half Hour Period
Over the Life of the Study

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An interview frequency distribution plot for the days that the in person interviews took place is shown in Figure 2.

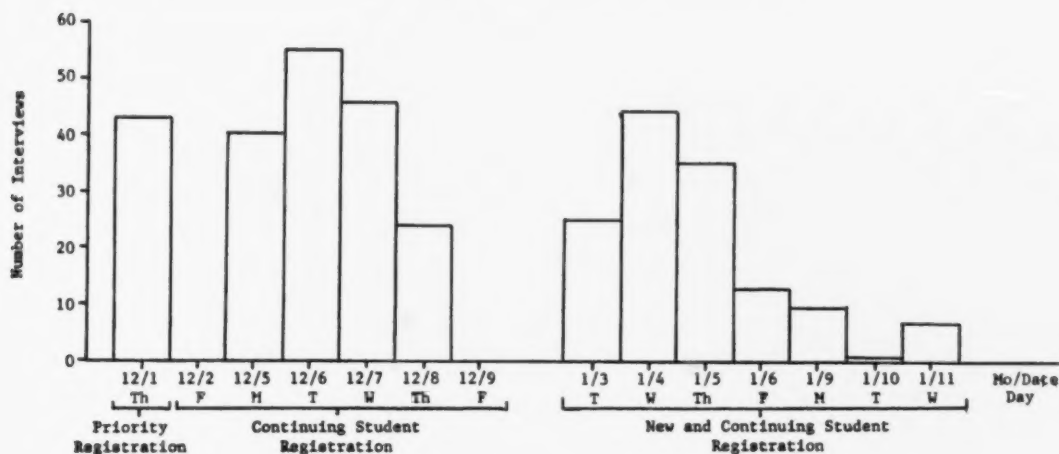


Figure 2

Number of Contacts On Each Day of In Person Interviews

An interview frequency distribution plot for the telephone contacts is shown in Figure 3.

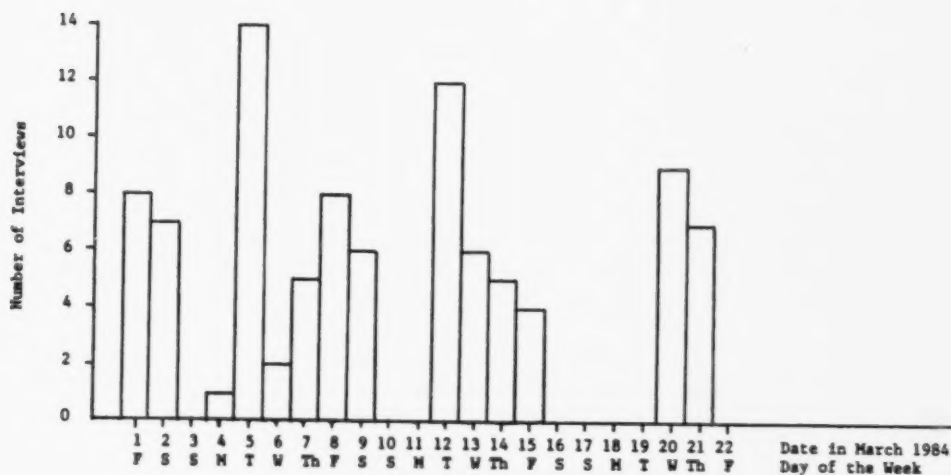


Figure 3

Number of Contacts On Each Day of the March Telephone Interview Period

Questionnaire

An example of the questionnaire used in this study is shown in Appendix A. The questionnaires were filled out by College personnel based on information from the student's study list and oral responses to questions asked by the staff member conducting the interview.

Chapter 4

RESULTS

The findings presented in this chapter are based on the data gathered from the 442 student questionnaires completed during the Spring 1984 semester. Full time students who were enrolled in classes on both campuses were most inclined toward schedule flexibility. Of the students in this category, 91 percent expressed a willingness to replace at least one desired class on their study list with another class. Part time evening students on the North Campus were the least flexible. Only 43 percent of these students were willing to allow changes to their schedules. Table 2 presents a summary of these findings for each of the eight enrollment categories.

Table 2
Proportion Of Students Willing To Replace a Desired
Class Choice With an Alternate Selection

Category	Sample Size	Percent Willing To Make an Alternate Selection
FT D/DE BC	47	91%
FT D/DE NC	50	74%
FT D/DE SC	60	83%
PT D/DE BC	54	80%
PT D/DE NC	56	59%
PT D/DE SC	86	67%
PT E NC	49	43%
PT E SC	40	65%

Employment and child care responsibilities affected the selection of time or place of classes for a higher proportion (73 percent) of the part time evening students on the North Campus than any other enrollment category. Part time day or day and evening students on the South Campus (PT D/DE SC) were least affected by these concerns. Table 3 presents a summary of the findings in this area for each of the eight enrollment categories.

Table 3
The Effect of Employment and Child Care Responsibilities
on the Student Selection of Time or Place of Classes

Category	Sample Size	Percent Affected Only By Employment	Percent Affected Only By Child Care	Percent Affected By Both Employment and Child Care
FT D/DE BC	47	43%	2%	6%
FT D/DE NC	50	52%	0%	2%
FT D/DE SC	60	52%	2%	2%
PT D/DE BC	54	37%	9%	9%
PT D/DE NC	56	43%	7%	4%
PT D/DE SC	86	33%	7%	5%
PT E NC	49	59%	8%	6%
PT E SC	40	60%	0%	8%

Although Table 2 shows the proportion of students in each enrollment category willing to accept schedule modifications, it does not indicate the number of courses each student would be willing to reschedule. As a measure of this degree of flexibility of each enrollment category, the proportion of the total number of units in which students were enrolled that would be rescheduled if necessary is shown in Table 4.

Part time day or day and evening students taking classes on both campuses (PT D/DE BC) were the most flexible according to this measure. These students were willing to reschedule 66 percent of the units in which they originally wished to enroll. Part time evening students on the North Campus (PT E NC) were willing to reschedule only 27% of their units and represented the least flexible enrollment category. To allow for direct comparison of this measure of flexibility between the eight enrollment categories in the face of widely varying sample sizes, the category units were extrapolated to correspond to a common sample size of 100 students. Table 4 presents a summary of these findings for each of the eight enrollment categories.

Table 4
Proportion and Number of Units Rescheduled for Each Category
Based on a Common Sample Size Extrapolated
to 100 Students

Category	True Sample Size	Percent of Total Units Rescheduled	Total Number of Units Enrolled (N = 100)	Total Number of Units Which Would Be Rescheduled (N = 100)
PT D/DE BC	47	52%	1398	727
PT D/DE NC	50	44%	1338	589
PT D/DE SC	60	41%	1463	600
PT D/DE BC	54	66%	619	409
PT D/DE NC	56	43%	589	253
PT D/DE SC	86	52%	626	326
PT E NC	49	27%	572	154
PT E SC	40	54%	489	264

Although students often indicated a willingness to schedule alternate classes to replace ones lost from their study list, rarely were there no restrictions for the choice of these alternate classes. In six of the eight enrollment categories the most often mentioned form of

alternate class selection was the change of the course only. A change of only class time was either the first or second most popular choice of five of the eight enrollment categories. Only full and part time students enrolled in classes on both campuses showed more than negligible interest in changing campuses to retain units lost from their study lists. Fifty-two percent of the students who were enrolled in classes on both campuses and indicated a willingness to change campuses to maintain units lost from their schedules would have been single campus students if all their changes were effected. Table 5 shows the distribution of units that students would reschedule over the various alternatives for each enrollment category.

Table 5
Distribution of Class Replacement Alternatives

Category	Sample Size	Total Number of Units Enrolled	Percent of Units Rescheduled By Changing the Following						
			Class Only	Time Only	Class & Time	Site Only	Class & Site	Time & Site	Class, Time & Site
FT D/DE BC	47	657	17%	15%	1%	11%	2%	4%	0%
FT D/DE NC	50	669	21%	22%	1%	0%	0%	0%	0%
FT D/DE SC	60	877.5	28%	7%	4%	1%	0%	0%	0%
PT D/DE BC	54	334.5	16%	19%	1%	24%	3%	4%	0%
PT D/DE NC	56	330	30%	8%	3%	2%	0%	0%	0%
PT D/DE SC	86	538.5	32%	9%	10%	1%	0%	0%	0%
PT E NC	49	280.5	27%	2%	3%	1%	0%	1%	0%
PT E SC	40	195.5	32%	18%	5%	0%	0%	0%	0%

The schedule flexibility of students who indicated that employment and/or child care responsibilities affected their selection of time or place of classes was compared with students who showed no affect on their study list creation because of these responsibilities. This comparison

was based on the percent of units each group reported would be replaced in the face of scheduling difficulties. The later group was the more flexible in only three enrollment categories. Table 6 presents a summary of these findings for each of the eight enrollment categories.

Table 6
Effect of Employment and Child Care Responsibilities
on Student Scheduling Flexibility

Category	For Those Whose Schedule Is Affected		For Those Whose Schedule Is Not Affected	
	Units Enrolled by Sample of Size 100	Percent of Units that Would Be Rescheduled	Units Enrolled by Sample of Size 100	Percent of Units that Would Be Rescheduled
FT D/DE BC	668	52%	730	51%
FT D/DE NC	700	47%	638	41%
FT D/DE SC	790	45%	673	35%
PT D/DE BC	345	67%	274	73%
PT D/DE NC	309	34%	280	52%
PT D/DE SC	338	52%	288	52%
PT E NC	449	30%	123	14%
PT E SC	321	53%	168	57%

Students often showed a significant willingness to replace a lost class with one meeting at a different time (see Table 5). The majority of these changes, however, were within the same period or to an earlier period of the day. The available schedule periods were defined to be: morning (7 a.m. to 11:59 a.m.), afternoon (12 noon to 4:59 p.m.), evening (5:00 p.m. to 10:00 p.m.). For the classes students expressed a willingness to replace with units at another time, Table 7 shows the proportion that would be moved to an earlier period of the day (e.g. evening to morning), a later period of the day (e.g. afternoon to evening) or that would be left in the same period (e.g. morning to morning).

Table 7
Distribution of Class Time Changes Acceptable
for Alternate Course Selections

Category	Number of Classes Rescheduled With an Alternate Time	Percent Rescheduled To Each of the Following Periods		
		Earlier	Same	Later
FT D/DE BC	45	49%	42%	9%
FT D/DE NC	57	30%	60%	10%
FT D/DE SC	30	70%	7%	23%
PT D/DE BC	31	39%	19%	42%
PT D/DE NC	13	62%	8%	31%
PT D/DE SC	45	60%	16%	24%
PT E NC	9	67%	33%	—
PT E SC	12	92%	8%	—

The reason most often given for not replacing a class (in other words, for reducing the students' class loads) was that the course was needed for certification or graduation. Table 8 shows the distribution of reasons students gave for not replacing a class in their schedule.

Table 8

Distribution of Reasons for Not Replacing a Lost Class

Category	Number of Classes Not Replaced	Certificate/ Graduation Requirement	Work Advancement	Interest, Knowledge, Fun	Last In Sequence	Needed For Transfer	Required	Credit	General Education	Other Unspecified
PT D/DE BC	106	71%	7%	4%	0%	8%	3%	2%	6%	0%
PT D/DE NC	139	71%	15%	9%	0%	1%	3%	0%	1%	1%
PT D/DE SC	188	89%	5%	4%	2%	0%	0%	0%	0%	0%
PT D/DE BC	69	45%	7%	35%	0%	3%	0%	4%	3%	3%
PT D/DE NC	81	54%	4%	36%	6%	0%	0%	0%	0%	0%
PT D/DE SC	152	67%	3%	19%	1%	0%	0%	0%	0%	11%
PT E NC	82	51%	10%	34%	0%	0%	0%	0%	0%	5%
PT E SC	54	67%	6%	19%	2%	0%	2%	0%	0%	6%

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Chapter 5

DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

Discussion

Review of Enrollment Category Samples

Because so much of the category FT D/DE BC was reached by phone selecting names in alphabetical order, students whose last name began with the letter I or higher had little chance of being asked their opinion. Most of the calls were made in the afternoon and thus students with classes, work or other obligations that took them away from their homes during this part of the day had little chance of participating in the sample.

A large portion of the FT D/DE NC category was reached by phone but all calls were placed between 11 a.m. and 4 p.m. and thus eliminated students in class or away from home during this portion of the day. No calls were placed in the evening when day only students might be expected to be home. Although this was a North Campus sample, the only students contacted in person were in the special situation of completing registration at the South Campus registration center. This sample may therefore be composed of students that possess somewhat different behavior patterns than the normal North Campus enrollee.

The majority of the FT D/DE SC category was completed before new students had an opportunity to participate. Although the Campus student population was nearly 40% male, this sample was 70% male. This gender bias might well affect the sample's responses to issues perceived differently by males and females. One such possible issue is a concern of this study

and deals with child care responsibilities.

A large portion of the PT D/DE BC category was reached by telephone in the afternoon. Students with classes or other obligations away from home at this time or with names beginning with the letter M or above had little opportunity to be chosen for this sample. A large portion of the telephone contacts were made with Emeritus Institute students. Since these students have their own registration center in Leisure World, they were not available for the in person interviews. Thus the populations for the in person and telephone interviews were different. Mixing samples from different populations strangles most statistical analysis techniques.

The majority of the PT D/DE NC category occurred during new student registration. The opinions of new students thus would be expected to more significantly affect this category than FT D/DE SC. Continuing students with registration appointments on days other than December 6, 1983 had little chance of being chosen for this sample.

A large portion of the PT D/DE SC category was contacted during priority registration. By the very nature of the need of these students for special registration attention they are not representative of the Campus population.

The entire PT E NC sample was contacted during the day. Since these are evening students, it might be expected that they have work or other obligations during the day which preclude their being on campus. Interviewing students only during the day removes such students from consideration.

The PT E SC sample was also interviewed during the day and the comments for the PT E NC sample apply. This sample is three quarters

female. The Campus population is 60% female and it is doubtful that the gender distribution of the part time evening student population is significantly higher than this value. Consequently this possible gender bias might well affect the responses from this sample of students to issues perceived differently by males and females. One such possible issue is a concern of this study and deals with child care responsibilities.

Figure 1 clearly shows that in person interviews were only conducted during the day. Students, unable to be on campus during the day had no opportunity to participate in this portion of the study. Figure 2 shows that most of the interviews were conducted with continuing students or new students with early registration appointments. These early appointments were given to students who filled out applications for admission during the fall semester. This group may not be representative of those applying nearer the beginning of classes. Figure 3 shows that only one of the telephone interviews was conducted on a monday and more telephone interviews were held on tuesday than any other day. Thus students available for calls on monday had less chance of selection to the sample than those students with tuesday free. There is some concern about the two month separation between the in person and telephone interviews. At the beginning of the semester, students might be reluctant to express any schedule flexibility for fear they would be requested to change a class. Midway through the semester, students might exhibit more flexibility because they know they won't be asked to change or because they have decided they don't particularly like the class, instructor, time or whatever and wish to make a change.

In spite of the concerns expressed above and the strong possibility that the samples are not demographically representative of their populations,

there is no reason to ignore the responses of these students. Rather, in interpreting these responses, care must be exercised in generalizing the attitudes expressed to the entire student population.

Discussion Concerning Table 4

Care must be used in reaching conclusions based on Table 4. Although each enrollment category is treated with equal importance throughout this study, they do not represent equal divisions of the District student population. Seventy-five percent of both the District and South Campus student populations were composed of part time students. The proportion on the North Campus was 80%. Although relatively few units were lost due to scheduling difficulties of students in the part time samples, the population of part time students was so large in the District that the total units lost to part time students could have easily exceeded the units lost to full time students. As an example consider the South Campus. The student population was 75 percent part time, 20 percent full time and 5 percent non-credit. Assume a sample of 100 students was chosen and there were 75 part time students and 20 full time students in it. Further assume, using the information in Table 4, that the number of units taken by each full time student was 14.6 and by each part time student was 6.3. Consequently, the 95 full and part time students would have been enrolled in 764.5 units. Again using Table 4 assume that each full time student would have rescheduled 6 units and each part time student would have been willing to reschedule 3.3 units. The full time students in the sample would have been willing to reschedule 120 units and the part time students would have been willing to reschedule 247.5 units. Thus, of the total units lost to scheduling inflexibility (397.0), 225 units (57%) would have been lost to part time student inflexibility and 172 units (43%)

to full time student inflexibility. Collectively the part time student enrollment categories play a major part in the level of scheduling flexibility of the College.

Implications

1. Students enrolled in classes on both campuses exhibited more flexibility than similar students attending only one campus.
2. Only students already attending both campuses showed significant interest in going to the other campus to reschedule a course lost from their study list.
3. Most students who attended both campuses and were willing to adjust their study lists would prefer to attend a single campus.
4. The time a class was offered was more important than the course itself. Faced with an inability to enroll in a desired class, a student was more likely to take a different class at that desired time than find an open section of the course.
5. The scheduling flexibility of students for whom work or child care do not affect the time and place of their courses differed little from those who had such constraints.
6. Students, who were willing to replace a class by enrolling in a course at a different time, preferred that class to be in an earlier period of the day than the original class.
7. The predominate reason a course was not available to be rescheduled was the student's need to complete the course for graduation or certification.

Recommendation

From the information considered in this study, it is recommended that the class periods chosen for the schedule of classes be as uniform as possible throughout a campus. If this is accomplished, a student faced with a closed or cancelled class, will find it easier to reschedule those units.

Student scheduling flexibility should be encouraged by each campus in this way because it will serve to maintain student enrollment and, thus, the financial support of the institution.

BIBLIOGRAPHY

- Applied Systems Institute, Inc. Work Patterns of Full-time College Students in 1974 and 1981. ERIC ED 228 969, 1983.
- Baratta, Mary K. Registration Study. Research Note. ERIC ED 156 276, 1978.
- Blakesley, James F. "Scheduling and Utilization." Planning for Higher Education. 10:43-51. Summer 1982.
- Byrkit, Donald R. Elements of Statistics. 3rd ed. New York: D. Van Nostrand Company, 1980.
- Capps, Joan. Report on Evening Student -- Profile and Weekend College Survey, Spring Semester, 1985. ERIC ED 254 294, 1985.
- Carnegie Council on Policy Studies in Higher Education. Three Thousand Futures. San Francisco: Jossey - Bass Publishers, 1982.
- Carrol, Constance M. "President's Message." Messages, Mission Viejo: Saddleback College. July 1986.
- Cohen, Wallace F. and Jeanne Atherton. "Marketing the Afternoon Program." New Directions for Community Colleges, Edited by William A. Keim and Marybelle C. Keim. 36:63-69. December 1981.
- Donsky, Aaron, Linda Burk, Cuba Hut. The Non Returning Student Follow Up: Who Are They? Where Have They Gone? A Special Study. ERIC ED 178 111, 1979.
- Friedman, William. Class Scheduling Preferences: Full-Time Students and Faculty, Fontbonne College, St. Louis Missouri. ERIC ED 176669, 1979.
- Gallay, Ralph and Ronald V. Hunter. "Why Adults Are Pursuing A Part-Time College Education." Collegiate News and Views. 32:13-16, Winter 1978-1979.
- Gresty, Steven A., W. Kevin Hunt, and David R. Golay. Course Schedules: Do They Reflect the Needs of the Student or the Institution? ERIC ED 205 103, 1981.
- Lucas, John A. Evaluation of Student Schedules for Those Registering During General Open Fall Registration--August 19-21, 1977. ERIC ED 145 879, 1977.
- Lucas, John A. Survey of Students Who Stopped Attending a Course, Fall 1979. ERIC ED 207 662, 1980.

- Nelson, C.N. and James Phaneuf. Afternoon Courses Data Information.
Saddleback Community College District Memorandum. February 10, 1986.
- Nelson, C.N. When Sections and Enrollment Report -- Fall, 1985.
Saddleback Community College District Memorandum, September 1985.
- Noonan, Roberta L. Student and Faculty Preferences for Class
Scheduling Patterns. ERIC ED 145 886, 1977.
- Pastor, Richard L. A Review of the Influential Factors and Sources of
Information Affecting the Enrollment Decisions of Students Accepted
To Northern Essex Community College. ERIC ED 247 986, 1984.
- Pollack, Art. "Promoting Instructional Excellence Through Class
Scheduling." Community College Review. 12:41-42. Fall 1984.
- Slark, Julie and Harold H. Bateman. Community Needs Assesment Survey
for Santa Ana College and the Rancho Santiago Community College
District. ERIC ED 186 057, 1980.
- South Oklahoma City Junior College. Institutional Research, Fiscal Year
1978: OASES Community Needs Assessment. Research Monograph XIII.
ERIC ED 164 065, 1978.
- Sworder, Steve. Determination of Student Willingness To Take Afternoon
Classes And Class Time Preference. ERIC ED (number not yet known) 1986.
- Thompson, Hugh I. "The Ready-for-Prime-Time Players: Colleges Cater to
the Adult Schedule." Educational Record. 66:33-37, Summer 1985.
- Zitzewitz, Barbara, Shirley Owens, Donna Branham, and Mitchell Weiss.
Determining the Reasons Why Some Applicants Admitted to a
Community College Do Not Begin Coursework. ERIC ED 225 609, 1982.

APPENDIX

QUESTIONNAIRE USED IN THE INVESTIGATION

UNIVERSITY OF CALIFORNIA
ERIC[®] CLEARINGHOUSE FOR
JUNIOR COLLEGES
8118 MATH-SCIENCES BUILDING
LOS ANGELES, CALIFORNIA 90024

AUG 15 1986

STUDENT CLASS SELECTION SURVEY FORM

Student Name: _____, (Student #) _____, (Zip Code) _____

☐ Rent Semester with Saddleback C.C.☐ Previous Attendance at Saddleback C.C.

Survey Location: _____

Survey Date/Time: _____

Completed by: _____

(Office Use)

Sample field:

	DAY	EVE	NIGHT	BOTH	OTHER
1. How often do you have trouble sleeping?					
2. How often do you feel nervous or anxious?					
3. How often do you feel tired or exhausted?					
4. How often do you have difficulty concentrating?					
5. How often do you experience physical symptoms (e.g., headaches, stomach issues)?					
6. How often do you feel stressed or overwhelmed?					
7. How often do you have trouble remembering things?					
8. How often do you feel irritable or impatient?					
9. How often do you have difficulty making decisions?					
10. How often do you feel lonely or isolated?					
11. How often do you experience changes in appetite?					
12. How often do you have trouble getting started on tasks?					
13. How often do you feel hopeless or pessimistic?					
14. How often do you have trouble maintaining relationships?					
15. How often do you experience changes in energy levels?					
16. How often do you feel restless or fidgety?					
17. How often do you have trouble staying motivated?					
18. How often do you feel overwhelmed by daily responsibilities?					
19. How often do you experience changes in mood?					
20. How often do you have trouble focusing on work or school?					

[illegible]

9/1 - []

List information from Student's Printout of Classes:

STUDENT RESPONSE

Circle Most Correct Answers

List Information from Student's Intent of Classlist:

COURSE	START TIME	DAYS OF WEEK (Circle)	SITE (If off-campus, pls. state specific site)	STUDENT RESPONSE	
				Circle Most Correct Answers	
Name & Course # Ticket # / Units	AM/PM (Circle)	M W F T Th	NO./SO./OTHER (Circle)	If this course () were not offered: - you would take the SAME - DIFFERENT class..... - at the SAME - ANOTHER time..... - at the SAME - OTHER site..... or reduce my class load by not replacing this class in my schedule: YES - NO	If "different," name class: _____ time: _____ If "another," specify where: _____ If "other," specify where: _____ ☐ Last in seq. ☐ Needed for cert./grad. ☐ Needed work advance. ☐ Other
Name & Course # Ticket # / Units	AM/PM (Circle)	M W F T Th	NO./SO./OTHER (Circle)	If this course () were not offered: - you would take the SAME - DIFFERENT class..... - at the SAME - ANOTHER time..... - at the SAME - OTHER site..... or reduce my class load by not replacing this class in my schedule: YES - NO	If "different," name class: _____ time: _____ If "another," specify where: _____ If "other," specify where: _____ ☐ Last in seq. ☐ Needed for cert./grad. ☐ Needed work advance. ☐ Other
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Yes	☐	No	☐
Yes	☐	No	☐

Other Comments:

THANK YOU FOR YOUR ASSISTANCE

BEST COPY AVAILABLE